

inch diameter of the bushing is considered practical where the holes are one inch or over, and where the holes in the jig are bored smooth. If the holes are rough-bored, a more liberal allowance is required. After the lining bushings are driven in place, they require re-lapping, as they always contract a little.

The outside of the removable bushings should be finished by lapping to a "dead smooth" finish, as otherwise they will soon wear loose. This should never, under any circumstances, be done with emery cloth, but with a cast-iron lap as illustrated in Fig. 20. The abrasive used in this case should be of flour grit with lard oil as a lubricant, the abrasive and oil being applied through a hole in the top of the lap. The work should be lapped with a regular even motion to insure its being

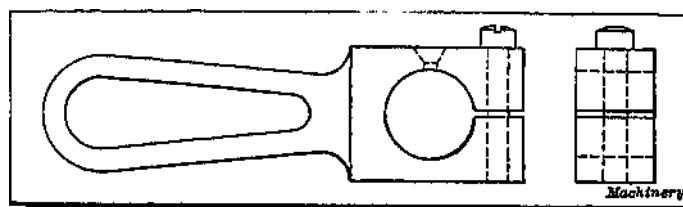


Fig. 20. Lap for Finishing Outside of Slip Bushings

straight, and should be brought to the temperature of the room by being cooled in benzine or gasoline before testing for a fit. The lapping should be carried to a point where the bushing is a wringing fit in its liner, but not tight enough to stick when left for a moment.

After the grinding and lapping of the removable bushings, their tops can be finished by lapping on a carborundum stone, in medium grit, wet with gasoline. A regular motion should be used across the face of the stone without turning or altering the relative position of the bushing. This lapping gives the bushings a good appearance, and, as the dimensions stamped are left black from the action of the fire in hardening, they can be read at a glance.

Driving Fit Allowances for Jig Bushings. — Standard dimensions for driving fit allowances for jig bushings, arranged according to the outside diameter of the bushing, are given in